

# SOW CHANGE PROPOSAL

SOW-02-833-3-08953A-5/1	Chg 1	18 Sept 2001
SOW-03-833-3-08953A-5/1	Chg 2	09 Dec 2002
SOW-04-CBG-08953A-5/1	Chg 2	09 Dec 2002
SOW-05-PMM142-08953A-5/1	Chg 1	09 Dec 2002

STATEMENT OF WORK (SOW)  
for the  
Specified Overhaul And Repair (SOAR)  
of the  
M1A1 Main Battle Tank  
NSN 2350-01-087-1095

SOW-02-833-3-08953A-5/1	Chg 1
SOW-03-833-3-08953A-5/1	Chg 2
SOW-04-CBG-08953A-5/1	Chg 2
SOW-05-PMM142-08953A-5/1	Chg 1

Replace current FY02 SOW-02-833-3-08953A-5/1, FY05 SOW-05-PMM142-08953A-5/1 with SCP 1, FY03 SOW-03-833-3-08953A-5/1 and FY04 SOW-04-CBG-08953A-5/1 with SCP 2 Statements Of Work with the attached SOW.

If approved, does this proposed change have the potential to have an impact on the cost or schedule?

\* Yes X

\*Changes that have the potential to impact cost or schedule will be reviewed by Maintenance Directorate (MD) and an impact statement provided to LCMC. Changes that do not have the potential to impact cost or schedule may not be reviewed by MD.

Change Submitted by: Wallace Dawson  
Equipment Specialist  
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MARCORSYSCOM, Albany GA

6 Feb 03

Change Approved by Chin S. Lee  
Logistics Management Specialist  
AFSS-Tanks (Code 142)  
MARCORSYSCOM, Albany, GA

24 MAR 03 Date

Change Disapproved by \_\_\_\_\_ (Name)  
Logistics Management Specialist  
\_\_\_\_\_  
(Code \_\_\_\_\_)  
MARCORSYSCOM, Albany, GA

\_\_\_\_\_ Date

**STATEMENT OF WORK**  
**SOW-05-PMM142-08953A-5/1**  
**FOR THE SPECIFIED OVERHAUL AND**  
**REPAIR (SOAR) FOR THE**  
**M1A1 MAIN BATTLE TANK**

**NSN: 2350-01-087-1095**

**TAMCN: E1888**

**ID# 08953A**

***28 March 2003***

**Barstow/SysCom Rewrite**

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**STATEMENT OF WORK (SOW)**  
**For The Specified Overhaul and Repair (SOAR) For The**  
**M1A1 Main Battle Tank**  
**NSN 2350-01-087-1095**

1.0 Scope. This Statement of Work (SOW), along with the applicable government documents, publications and military specifications and standards listed in this SOW establishes, sets forth tasks, and identifies the work efforts that shall be performed by the Marine Corps Depot. This document contains requirements to restore the M1A1 Main Battle Tank to Condition Code "B". Code "B" is defined as new, used, repaired or reconditioned material which is serviceable and issueable for its intended purpose but which is restricted from issue for specific units, activities, or geographical areas by reason of its limited usefulness or short service- life expectancy. Includes material with three through six months selflife remaining.

1.1 Background. SOAR is defined as "That maintenance technique which incorporates both the advantages of our current Inspect and Repair Only As Required (IROAN) processes and those specified rebuild processes as defined within an applicable DMWR." The SOAR allows management to apply practicality to equipment maintenance by virtue of not incurring "TOTAL REBUILD" cost yet extending a system's service life beyond that which would have been derived if the system had only undergone an IROAN Maintenance Program. The SOAR concept will also place the burden of responsibility for ensuring those system components or assemblies that were specified within the SOAR as having to be rebuilt back into the Depot arena. Rebuild is technically defined as being of "Like New" condition, whereas IROAN is a process that employs the repair as necessary concept thus moving the burden to the user. IROAN can be defined as a Limited Conditional repair process, which places "NO" liability upon the Depot.

2.0 Applicable Documents The following documents form a part of this SOW to the extent specified. Unless otherwise specified, the issues of these documents are those listed in the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto which is in effect on the date of solicitation. In the event of conflict between the documents referenced herein and the contents of this SOW, the contents of this SOW shall be the superseding requirements.

2.1 Military Specifications

MIL-PRF-2104G

Lubricating Oil, Internal Combustion Engine,  
Combat/Tactical Service

MIL-PRF-10924G

Grease, Automotive and Artillery

2.2 Military Standard

MIL-STD-129

Military Marking for Shipment and Storage

### 2.3 Other Government Documents and Publications

ATPD-2240	Tank Combat, Full Tracked, M1 Series, Processing for Storage and Shipment
DoD 4000.25-1-M	Military Standard Requisitioning and Issue Procedures
MI-08953A-25/1	Installation of Guard Assembly
MI-08953A-25/3	Installation of Position Location Reporting System
MI-08953A-25/5	Installation of The Two-Piece Fuel Nozzle Kit
MI-08953A-25/7	Replacement of Hydraulic Pump Pressure Hose
MI-08953A-25/29	M1 Series Tank, Case Drain Coupling Modification
MI-08953A-35/4	External Auxiliary Power Unit
MI-08953A-35/2A	Installation of Sincgars Radio System
MI-08953A-35/8	Installation of Shield in Manual Hydraulic Pump Handle Assembly
MI-08953A-35/9	Installation of Lubrication Fitting in The Inner Race Bearing Assembly
MI-08953A-35/10	Modify the Gunners Station
MI-08953A-35/11	Modify the Ammo Door Latch Mechanism
MI-08953A-35/12	Installation for the Automatic Fire Extinguisher System Wiring Harness Guard Kit
MI-08953A-35/13	Installation of the Battlefield Override System
MI-08953A-35/14	Installation of the Improved Drivers Periscope Retention
MI-08953A-35/15	Installation of the Smoke Generator Fuel Line
MI-08953A-35/16	Modify Drivers and Loaders Hatch Rim
MI-08953A-35/17	Installation of the Manual Blasting Machine Wiring Harness and Primer Diode Assembly
MI-08953A-35/18	Modify Drivers Hatch Lifting Mechanism
MI-08953A-35/19	Modify Commanders Weapon Station Hatch
MI-08953A-35/20	Improve Operation of the Hull Network Distribution Box
MI-08953A-35/21	Installation of the Pulse Jet Air System
MI-08953A-35/22	Replace Stub Case Catcher
MI-08953A-35/23	Modify Engine Component Fire Extinguisher System Dispersion Tube
MI-08953A-35/24	Install Filter Fire Modification
MI-08953A-35/25	Install Driver's Hatch Interlock System
MI-08953A-35/26	Retrofit External Auxiliary Power Unit
MI-08953A-35/27	Install Intercommunication Set Vehicular AN/VIC3 (V)1
MI-08953A-35/28	Install AN/VAS-5A(V) 4 (DVE)
MI-08953A-35/30	Installation of Global Positioning System Receiver (PLGR)
MI-08953A-50/6	Upgrade Fire Control System (Armor Enhancement Initiative)

TB-09728-14&P	Armor Vehicle Maintenance System
TB 9-1300-278	Armor Depleted Uranium
TB 9-2350-320-14	120MM Ammunition
TB 9-2520-276-12	Warranty for the Transmission
TB 9-2590-509-23&P	Mine Clearing Blade, M1A1
TB 43-0001-39-5	Track Components & Solid Rubber Tires
TI-5820-25/22	Electromagnetic Environmental Effects (E3)
	Procedures
	For Installation of Communication Equipment on U.S.
	Marine Corps Platforms
TI-08953A-25/10	NBC Sponson Access Covers Spacers
TI-08953A-15/4	Deadline Criteria for the M1A1 Main Battle Tank
TM-4750-15/1	Painting Registration Markings
TM-4750-15/2	Camouflage Pattern
TM-3080-50	Corrosion Control Procedures for Depot Maintenance
	Activities

#### Military Handbook (For Guidance)

MIL-HDBK-61

Configuration Management Guidance

#### 2.4 Depot Maintenance Work Requirements (DMWRs)

DMWR 9-1200-206-CEU	Computer Electronic Unit
DMWR 9-1200-206-GPS-1	Gunners Primary Sight
DMWR 9-1200-206-GPS-2	Gunners Primary Sight Azimuth Drive Assembly
DMWR 9-1200-206-GPS-3	Gunners Primary Sight Objective & Relay Assembly
DMWR 9-1200-206-GPSE	Commanders Gunners Primary Sight Extension
DMWR 9-1200-206-GTR	Gun Trunnion Resolver
DMWR 9-1200-206-LOS-EU	Line of Sight Electronic Units
DMWR 9-1200-206-LRF	Laser Range Finder
DMWR 9-1200-206-STDA	Servo Torque Drive Assembly
DMWR 9-1200-206-TEU	Thermal Electronic Unit
DMWR 9-1200-206-TIS	Thermal Image System
DMWR 9-1200-206-TPCU	Thermal Power Control Unit
DMWR 9-1200-206-TRU	Thermal Receiver Unit
DMWR 9-1200-206-GAS	Gunners Auxiliary Sight
DMWR 9-2350-255-3	Armor Repair
DMWR 9-2520-276 Vols. 1-3	Transmission Assembly W/Container
DMWR 9-2520-279	Final Drive
DMWR 9-2530-200-24	M1 Hull Track
DMWR 9-2350-264-2	Turret M1& M1A1
DMWR 9-2350-264-2-1	Traverse Servomechanism
DMWR 9-2350-264-2-2	Elevation Servomechanism
DMWR 9-2350-264-2-3	Turret Hydraulic Distribution Valve
DMWR 9-2350-264-2-4	Hull/Turret Slip Ring Assembly

DMWR 9-2350-264-2-5	Hydraulic Motor Assembly
DMWR 9-2350-555 Vols. 1-6	Hull Power Plant Electronics Components
DMWR 9-2520-276-1 Vols. 1-3	Transmission Assembly W/Container
DMWR 9-2550-526	Hydraulic Pump
DMWR 9-2835-255 Vols. 1-5	Turbine Engine, FieldService Model AGT 1500
DMWR 9-2910-231	Electro-Mechanical Fuel System
DMWR 9-2920-254	Generator (Westinghouse)
DMWR 9-2920-259	Generator (Bendix)
DMWR 9-2940-200	Rotary Pump Assembly
DMWR 9-4320-326	Hydraulic Pump (Vickers)
DMWR 9-4800-206	Nuclear, Biological, Chemical System

## 2.5 Stock List

SL-3-08953A	Tank, Combat, Full Tracked M1A1
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## 2.6 Operators Manuals

TM 08953A-10/1-1	Operator's Manual Vol 1
TM 08953A-10/1-2	Operator's Manual Vol 2

## 2.7 Technical Manuals for Hull

TM 08953A-20-2-1	Unit Maintenance Manual Vol 1
TM 08953A-20-2-2	Unit Maintenance Manual Vol 2
TM 08953A-20-2-3	Unit Maintenance Manual Vol 3
TM 08953A-20-2-4	Unit Maintenance Manual Vol 4
TM 08953A-20-2-5	Unit Maintenance Manual Vol 5
TM 08953A-24/4-1	Schematics
TM 08953A-24P/1-1	Unit Direct and General Support Maintenance
	Repair Parts and Special Tools List
TM 08953A-34/5-1	Unit Direct and General Support Maintenance Vol. 1
TM 08953A-34/5-2	Unit Direct and General Support Maintenance Vol. 2

## 2.8 Technical Manuals for Turret

TM 08953A-20-3-1	Unit Maintenance Manual Vol 1
TM 08953A-20-3-2	Unit Maintenance Manual Vol 2
TM 08953A-20-3-3	Unit Maintenance Manual Vol 3
TM 08953A-20-3-4	Unit Maintenance Manual Vol 4
TM 08953A-24/4-2	Schematics
TM 08953A-24P/2-2	Unit Direct and General Support Maintenance
	Repair Parts and Special Tools List
TM 08953A-34/6-1	Unit Direct and General Support Maintenance Vol. 1
TM 08953A-34/6-2	Unit Direct and General Support Maintenance Vol. 2
TM 4700-15/1	Ground Equipment Record Procedures



## 2.9 Technical Manuals for Sight/Fire Control

TM 08953A-34/7-1	Unit Direct and General Support Maintenance Vol 1
TM 08953A-34/7-2	Unit Direct and General Support Maintenance Vol 2
TM 08953A-34/7-3	Unit Direct and General Support Maintenance Vol 3
TM 08953A-34P/8	Unit Direct and General Support Maintenance Repair Parts and Special Tools List Vol 1

## 2.10 Technical Manuals General

TM 5-4210-218-13&P	Fire Bottles
TM 9-1000-202-14	Evaluation of Cannon Tubes
TM 9-2300-422-23&P	Oil Analysis Program
TB 9-2350-283-23-1	Configuration Matrix
TM 9-2520-276-34	Transmission Maintenance
TM 9-2520-276-34P	Transmission Repair Parts and Special Tool List
TM 9-2520-279-34P	Final Drive
TM 9-2835-255-34	Engine Maintenance
TM 9-2835-255-34&P	Engine Repair Parts and Special Tool List
TM 9-4910-573-14&P	Ground Hop Support Set
TM 9-4910-751-14&P	STE-M1
TM 9-4910-753-13&P	Powerpack Maintenance Stand
TM 9-4931-586-12-1&P	Test Set DSETS (Core)
TM 9-4931-586-12-2&P	Test Set DSETS (M1)
TM 9-4931-586-12-4&P	Test Set DSETS (TIS)
TM 9-4931-586-30&P	Test Set DSETS (DS/MAINT)
TM 9-4933-259-14&P	Muzzle Boresight
TM 9-2530-200-24	Track
TM 9-6115-24&P	External Auxiliary Power Unit
TM 11-5855-311-12&P-1	Operators and Unit Maintenance Manual For Driver's Vision Enhancer (DVE)

## 2.11 Industry Standards

ANSI/ISO/ASQC Q9001-2000	Quality Management Systems Requirement
JESD625-A	Requirements for Handling Electrostatic-Discharge Sensitive (ESDS) Devices

Industry Standard (For Guidance)

ANSI/EIA-649

National Consensus Standard for Configuration  
Management

Copies of Military Specifications and Standards are available from DOD Single Stock Point, Document Automation and Production Service, Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, commercial telephone number (215) 697-2179 or DSN 442-2179, or <http://www.dodssp.daps.mil>. Copies of other government documents and publications required by Depots in connection with specific SOW requirements shall be obtained through the Contracting Officer: Contracts Department (Code 891), P.O. Drawer 43019, 814 Radford Blvd., Marine Corps Logistics Bases, Albany Georgia 31704-3019, commercial telephone number (229) 639-6761 or DSN 567-6761. Copies of engineering drawings, if applicable, shall be obtained from the Supply Chain Management Center, Attn: Code 5831, 814 Radford Blvd., Suite 20320, Albany, Georgia 31704-0320, commercial telephone number (229) 639-6476 or DSN 567-6476.

### 3.0 Requirements

3.1 General Task. In fulfilling the specified requirements, the Depot shall:

- a. Provide material, labor, facilities, missing parts and repair ~~parts~~ necessary to specifically rebuild, diagnose, restore, and test the M1A1 Main Battle Tank. Upon completion of the SOAR, vehicles shall be condition Code "B." The Engine and Transmission listed in Appendix "A" shall be condition Code "A".
- b. Special Instructions in Appendix "A" shall be adhered to.
- c. The Depot shall comply with all Contract Data Requirements List identified in Section 4.0 of this SOW.
- d. Final on-site inspection using Appendix "B" shall be performed and witnessed by a Marine Corps Systems Command (MCSC) (Code AFSS, PMM-142), Tanks Section, Albany, GA representative.

3.2 Detail Tasks. The following tasks describe the different phases for the SOAR of the M1A1 Main Battle Tank.

3.2.1 Phase I – Pre-Induction Inspection. Pre-Induction inspection analysis shall be performed for each M1A1 Main Battle Tank to identify any missing components. These findings shall be annotated and provided to (MCSC) (Code AFSS, PMM-142), Tanks Section, Albany, GA representative in accordance with Section 4.0 and the Special Instructions (Appendix A) of this SOW.

3.2.2 Phase II - SOAR. After pre-induction inspection has been completed, this Statement of Work, shall be accomplished in accordance with the following documents/publications:

DMWR 9-1200-206-CEU

Computer Electronic Unit

DMWR 9-1200-206-GPS-1	Gunners Primary Sight
DMWR 9-1200-206-GPS-2	Gunners Primary Sight Azimuth Drive Assembly
DMWR 9-1200-206-GPS-3	Gunners Primary Sight Objective & Relay Assembly
DMWR 9-1200-206-GPSE	Commanders Gunners Primary Sight Extension
DMWR 9-1200-206-GTR	Gun Trunnion Resolver
DMWR 9-1200-206-LOS-EU	Line of Sight Electronic Units
DMWR 9-1200-206-LRF	Laser Range finder
DMWR 9-1200-206-STDA	Servo Torque Drive Assembly
DMWR 9-1200-206-TEU	Thermal Electronic Unit
DMWR 9-1200-206-TIS	Thermal Image System
DMWR 9-1200-206-TPCU	Thermal Power Control Unit
DMWR 9-1200-206-TRU	Thermal Receiver Unit
DMWR 9-1200-206-GAS	Gunners Auxiliary Sight
DMWR 9-2350-255-3	Armor Repair
DMWR 9-2520-276 Vols1-3	Transmission Assembly W/Container
DMWR 9-2520-279	Final Drive
DMWR 9-2530-200-24	M1 Hull Track
DMWR 9-2350-264-2	Turret M1& M1A1
DMWR 9-2350-264-2-1	Traverse Servomechanism
DMWR 9-2350-264-2-2	Elevation Servomechanism
DMWR 9-2350-264-2-3	Turret Hydraulic Distribution Valve
DMWR 9-2350-264-2-4	Hull/Turret Slip ring Assembly
DMWR 9-2350-264-2-5	Hydraulic Motor Assembly
DMWR 9-2350-555 Vols 1-6	Hull Power Plant Electronics Components
DMWR 9-2520-276-1 Vols 1-3	Transmission Assembly W/Container
DMWR 9-2550-526	Hydraulic Pump
DMWR 9-2835-255 Vols 1-5	Turbine Engine, Field Service Model AGT 1500
DMWR 9-2910-231	Electro-Mechanical Fuel System
DMWR 9-2920-254	Generator (Westinghouse)
DMWR 9-2920-259	Generator (Bendix)
DMWR 9-2940-200	Rotary Pump Assembly
DMWR 9-4320-326	Hydraulic Pump (Vickers)
DMWR 9-4800-206	Nuclear, Biological, Chemical System
MI-08953A-25/1	Installation of Guard Assembly
MI-08953A-25/3	Installation of Position Location Reporting System
MI-08953A-25/5	Installation of The Two-Piece Fuel Nozzle Kit
MI-08953A-25/7	Replacement of Hydraulic Pump Pressure Hose
MI-08953A-25/29	M1 Series Tank, Case Drain Coupling Modification
MI-08953A-35/4	External Auxiliary Power Unit
MI-08953A-35/2A	Installation of Sincgars Radio System
MI-08953A-35/8	Installation of Shield in Manual Hydraulic Pump Handle Assy
MI-08953A-35/9	Installation of Lubrication Fitting in The Inner Race Bearing Assembly
MI-08953A-35/10	Modify the Gunners Station
MI-08953A-35/11	Modify the Ammo Door Latch Mechanism

MI-08953A-35/12	Installation for the Automatic Fire Extinguisher System
MI-08953A-35/13	Wiring Harness Guard Kit
MI-08953A-35/14	Installation of the Battlefield Override System
MI-08953A-35/15	Installation of the Improved Drivers Periscope Retention
MI-08953A-35/16	Installation of the Smoke Generator Fuel Line
MI-08953A-35/17	Modify Drivers and Loaders Hatch Rim
MI-08953A-35/18	Installation of the Manual Blasting Machine Wiring Harness and Primer Diode Assembly
MI-08953A-35/19	Modify Drivers Hatch Lifting Mechanism
MI-08953A-35/20	Modify Commanders Weapon Station Hatch
MI-08953A-35/21	Improve Operation of the Hull Network Distribution Box
MI-08953A-35/22	Installation of the Pulse Jet Air System
MI-08953A-35/23	Replace Stub Case Catcher
MI-08953A-35/24	Modify Engine Component Fire Ext Sys Dispersion Tube
MI-08953A-35/25	Install Filter Fire Modification
MI-08953A-35/26	Install Driver's Hatch Interlock System
MI-08953A-35/27	Retrofit External Auxiliary Power Unit
MI-08953A-35/28	Install Intercommunication Set Vehicular AN/VIC3 (V) 1
MI-08953A-35/30	Install AN/VAS-5A(V)4 (DVE)
MI-08953A-50/6	Installation of the Global Positioning Receive System (PLGR)
SL-3-08953A	Upgrade Fire Control System (Armor Enhancement Initiative)
TB-09728-14&P	Tank, Combat, Full Tracked M1A1
TB 9-1300-278	Armor Vehicle Maintenance System
TB 9-2350-320-14	Armor Depleted Uranium
TB 9-2520-276-12	120MM Ammunition
TB 9-2590-509-23&P	Warranty for the Transmission
TB 43-0001-39-5	Mine Clearing Blade, M1A1
TI-5820-25/22	Track Components & Solid Rubber Tires
TI-08953A-25/10	Electromagnetic Environmental Effects (E3) Procedures for
TM-4750-15/1	Installation of Communication Equipment on U.S. Marine
TM-4750-15/2	Corps Platforms
TM 08953A-10/1-1	NBC Sponson Access Covers Spacers
TM 08953A-10/1-2	Painting Registration Markings
TM 08953A-20-2-1	Camouflage Pattern
TM 08953A-20-2-2	Operator's Manual Vol 1
TM 08953A-20-2-3	Operator's Manual Vol 2
TM 08953A-20-2-4	Unit Maintenance Manual Vol 1
TM 08953A-24/4-1	Unit Maintenance Manual Vol 2
TM 08953A-24P/1-1	Unit Maintenance Manual Vol 3
TM 08953A-34/5-1	Unit Maintenance Manual Vol 4
TM 08953A-34/5-2	Unit Maintenance Manual Vol 5
	Schematics
	Unit Direct and General Support Maintenance
	Repair Parts and Special Tools List
	Unit Direct and General Support Maintenance Vol 1
	Unit Direct and General Support Maintenance Vol 2

TM 08953A-20-3-1	Unit Maintenance Manual Vol 1
TM 08953A-20-3-2	Unit Maintenance Manual Vol 2
TM 08953A-20-3-3	Unit Maintenance Manual Vol 3
TM 08953A-20-3-4	Unit Maintenance Manual Vol 4
TM 08953A-24/4-2	Schematics
TM 08953A-24P/2-2	Unit Direct and General Support Maintenance
	Repair Parts and Special Tools List
TM 08953A-34/6-1	Unit Direct and General Support Maintenance Vol 1
TM 08953A-34/6-2	Unit Direct and General Support Maintenance Vol 2
TM 08953A-34/7-1	Unit Direct and General Support Maintenance Vol 1
TM 08953A-34/7-2	Unit Direct and General Support Maintenance Vol 2
TM 08953A-34/7-3	Unit Direct and General Support Maintenance Vol 3
TM 08953A-34P/8	Unit Direct and General Support Maintenance
	Repair Parts and Special Tools List Vol 1
TM 5-4210-218-13&P	Fire Bottles
TM 9-1000-202-14	Evaluation of Cannon Tubes
TM 9-2300-422-23&P	Oil Analysis Program
TB 9-2350-283-23-1	Configuration Matrix
TM 9-2520-276-34	Transmission Maintenance
TM 9-2520-276-34P	Transmission Repair Parts and Special Tool List
TM 9-2520-279-34P	Final Drive
TM 9-2835-255-34	Engine Maintenance
TM 9-2835-255-34&P	Engine Repair Parts and Special Tool List
TM 9-4910-573-14&P	Ground Hop Support Set
TM 9-4910-751-14&P	STE-M1
TM 9-4910-753-13&P	Powerpack Maintenance Stand
TM 9-4931-586-12-1&P	Test Set DSETS (Core)
TM 9-4931-586-12-2&P	Test Set DSETS (M1)
TM 9-4931-586-12-4&P	Test Set DSETS (TIS)
TM 9-4931-586-30&P	Test Set DSETS (DS/MAINT)
TM 9-4933-259-14&P	Muzzle Boresight
TM 9-2530-200-24	Track
TM 9-6115-24&P	External Auxiliary Power Unit
TM 11-5855-311-12&P-1	Operators and Unit Maintenance Manual for Drivers Vision Enhancer (DVE)

Deficiencies noted on the Pre-Induction Inspection Analysis shall be rebuilt/replaced. The SOAR requires the replacement of mandatory replacement parts.

a. Hardware

(1) Replace broken, unserviceable and/or missing hardware including nuts, bolts, screws, washers, turnlock fasteners, mandatory replacement items, safety and onetime use items, etc., in accordance with this SOW. Unserviceable would include any of the above that failed to function properly.

(2) Ensure proper hardware locking devices are present on all moving mechanical assemblies.

(3) Hardware normally supplied with commercial parts shall be used in accordance with applicable documents/publications and directives.

### 3.2.3 Phase III - Inspection, Testing and Final Acceptance

a. Inspection, Testing and Final Acceptance of the M1A1 Main Battle Tank shall be conducted in accordance with Appendix "A" and Appendix "B." These completed documents shall be provided to MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA in accordance with Section 4.0 of this SOW.

b. The Depot shall be responsible for the conducting of required test and shall ensure MCSC (Code AFSS, PMM-142), Tanks Section, Albany GA representatives are available to complete the final acceptance. Final Acceptance, Inspection, and Testing shall be accomplished by the Depot, with an MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA representative present. A minimum of two-weeks notice shall be given to MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA representative prior to the beginning of final acceptance inspection and testing. The testing area shall be clear of all equipment parts, components, etc., not required for the final inspection/test.

c. The Depot shall be responsible for correcting any deficiencies identified during the final inspection/testing. MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA representative will require the Depot to repeat test portions thereof, if the original test fails to demonstrate compliance with this SOW.

### 3.2.4 Phase IV – Packaging, Handling, Storage and Transportation (PHS&T)

a. The Depot shall be responsible for the preservation and packaging of item(s) being repaired/rebuilt under the terms of this Statement of Work. Items scheduled for shipment shall be preserved to Level "B" in accordance with ATPD-2240, Drive-on/Drive-off.

b. Drive-on/Drive-off and Modified Drive-away are defined as follows:

Drive-on/Drive-off: Batteries shall be hot and disconnected from the vehicle electrical system. Terminals and leads shall be taped. Fuel tanks shall be ¼ full of JP8. Air intake system, exhaust system, brake system, drive train and gauges shall be depreserved.

c. Marking for shipment and storage shall be in accordance with MILSTD-129.

d. The Marine Corps will provide the Depot with the shipping address (es) for delivery of the SOAR equipment. The Depot shall be responsible for arranging for the shipment to the pre designated site(s). The Marine Corps will be responsible for transportation cost associated with shipping the subject equipment to and from the Depot.

### 3.3 Configuration Management

#### 3.3.1 Configuration Status Accounting (CSA)

a. The Depot shall record and submit data on retrofit accomplished during Phase II. All approved Modification Instructions (MIs) shall be verified or applied during Phase II of the SOAR Program.

b. The Depot shall determine the application status of approved configuration changes by visual inspection. MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA representative will identify the configuration changes to be inspected by furnishing a Configuration Inspection Checklist to the Depot. The Depot shall use only one checklist (Appendix B) per M1A1 Main Battle Tank to record their inspection findings along with other required data.

c. The Depot shall record serial numbers of the assemblies listed on the Configuration Inspection Checklist. The Depot shall record the information on the same form that was used to record the application status of configuration changes.

3.3.2 Configuration Management The Depot shall apply configuration control procedures to established configuration items. The Depot shall not implement any changes to an item's documented performance or design characteristics without written authorization. If it is necessary to temporarily depart from the authorized configuration, the Depot shall prepare and submit a Request for Deviation. MIL-HDBK-61 and ANSI/EIA-649 provide guidance for preparing this configuration control document.

3.4 Government Furnished Equipment (GFE)/Government Furnished Materiel (GFM) The Management Control Activity (MCA/Code 571-1) will coordinate Government Furnished Equipment/Government Furnished Material (GFE/GFM) request and maintain a central control system on all government assets in the Depot's possession. The MCA will forward a GFE Accountability Agreement to the Depot for signature on an annual basis to establish a chain of custody and identify property responsibilities for Marine Corps assets. The Depot is to acknowledge receipt of GFM to the MCA within 15 days of receipt. This can be done by mailing a copy of the DD1348 to Material Management Department, Management Control Activity (Code 571-1), 814 Radford Blvd., STE 20320, Albany, Georgia 31704-0320 or faxing a copy to commercial telephone number (229) 639-5498 or DSN 567-5498.

3.5 Contractor Furnished Materiel (CFM) The Depot may requisition material as required in the performance of the SOW through the DoD Supply System. DoD 4000.25-1-M (MILSTRIP), Chapter 11 provides guidance to Depots on the requisitioning process. The Depot's decision to utilize CFM procured from the DoD Supply System shall be based upon cost effectiveness, availability of material and the required completion/delivery.

3.6 Electromagnetic Environmental Effects (E3) Procedures The Depot shall plan for the proper E3 control procedures during the SOAR process and use TI-5820-25/22 in conjunction with the detailed requirements specified in this document.

3.7 Electrostatic Discharge (ESD) Control Program. The Depot shall establish, implement, and document an ESD control program following the guidelines provided in JESD625A. ESD protective measures shall be used during manufacturing, handling, inspection, testing, marking, packaging, storing, and transporting ESD sensitive components.

3.8 Quality Assurance Provisions. The Depot shall provide and maintain a Quality System that as a minimum adheres to the requirements of ANSI/ISO/ASQC Q9001:2000, Quality Management Systems – Requirements. The Depot work shall be subject to reviews and inspections for compliance with the procedures and standards by MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA representative during working hours. Inspection by MCSC, (Code AFSS, PMM-142), Tanks Section, Albany, GA representative of test plans and materials furnished hereunder does not relieve the Depot from any responsibility regarding defects or other failures to meet contract requirements which may be disclosed prior to final acceptance. Failure of the Depot to promptly correct deficiencies discovered shall be reason for suspension of acceptance until corrective action has been accomplished. The Depot shall have in place documented procedures and standards for quality assurance and the Depot work shall be subject to reviews and inspections for compliance with the procedures and standards by MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA. Noncompliance with procedures resulting in degraded quality of work may result in a stopwork order requiring action by the Depot to correct the work performed and to enforce compliance with quality assurance procedures or face contract termination. Notwithstanding such MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA representative inspection, it shall be the Depot responsibility to ensure that the entire system meets the performance requirements delineated and addressed in this SOW and applicable references. The Depot shall establish and maintain an Inspection System Requirement in compliance with ANSI/ISO/ASQC Q9001:2000, Quality Management Systems-Requirement and in accordance with this SOW. The Depot shall provide an Inspection and Test Plan to MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA.

3.9 Rejection. Failure to comply with any of the specified requirements listed herein shall be reason for rejection by MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA representative. The Depot shall, at no additional cost to MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA representative, provide the following:

- a. Develop an approach for modification or correction of all discrepancies.
- b. Upon approval of a documented approach, the Depot shall correct the discrepancies.

4.0 Reports. The following reports shall be delivered and submitted to Marine Corps Systems Command (Code AFSS, PMM-142), Tanks Section, 814 Radford Blvd., STE 20343, Albany, Georgia 31704-0343.

4.1 Weekly Progress Report. The Depot shall provide Weekly Progress Reports, to MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA summarizing the progress and status of the SOAR Program (Appendix “D” maybe used as an example).



4.2 Monthly Progress Report. The Depot shall provide Monthly Cost Reports to MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA summarizing the funds expended to include the material/repair parts utilized.

4.3 Pre-Induction Inspection/Final Inspection Record/Acceptance Tests/Final Assembly and Testing/Final Performance Check The Depot shall complete a Pre-Induction Inspection Checklist, Final Inspection Record, Acceptance Test, Final Assembly and Testing, and Final Performance Check for each M1A1 Main Battle Tank repaired. These documents shall be available during final acceptance inspection. One copy of each document shall be provided to MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA after final acceptance of the M1A1 Main Battle Tank.

4.4 Dynamometer Run-In Schedules. The Depot shall complete a copy of the Dynamometer Run-In Schedules. These documents shall show dynamometer test results required on the M1A1 during the SOAR Phase. These documents shall be available during final acceptance testing. One copy shall be provided MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA after acceptance of the M1A1 Main Battle Tank.

## **APPENDIX A**

### **SPECIAL INSTRUCTIONS FOR THE SOAR FOR THE M1A1 TANK**

1. All Supply System Responsibility Items (SSRI) will be repaired/boxed and shipped with each vehicle to Condition Code "A" standards, with the exception of the AN/VVS2A (Driver's Viewer).
2. MCSC, (Code AFSS, PMM-142), Tanks Section, Albany, GA reserves the right to request a Pre-Final Acceptance Limited Technical Inspection (LTI) in accordance with this SOW.
3. The Depot shall conduct a visual inspection prior to induction of any vehicles into the Depot production facility for work identified within the SOW. Prior to the inspection, the Depot shall notify MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA representative that they are ready to proceed with their pre-induction inspection. A representative from MCSC, (Code AFSS, PMM-142), Tanks Section, Albany, GA will be present or a delegated representative for the pre-induction inspection.

**NOTE:** All vehicles must be complete. A copy of the owning units (LTI) must accompany the vehicle to the Depot in the Track Vehicle Log Book.

**NOTE:** Fleet Support Division (FSD) shall submit a Report of Discrepancy (ROD), with a copy to, MCSC, (Code AFSS, PMM-142), Tanks Section, Albany, GA no later than ten (10) working days after the Pre-Induction Inspection is completed.

4. All vehicle lubricants will be replaced. New improved ~~CAA~~ Grease MIL-PRF-10924G will be used.
5. 15W40 Oil will be used in Transmission, Final Drives and Road Wheel Hubs in accordance with MIL-PRF-2104G.
6. All shocks and road arm housings will be removed 100%. Rotary Shocks found unserviceable will be repaired/replaced as necessary.
7. All rear fuel cells will be removed drained and cleaned in accordance with current directives. All forward fuel cells will be drained, inspected and cleaned in accordance with current directives.
8. JP8 fuel will be used in all Marine Corps Tanks. JP8 is the primary fuel authorized for use.
9. Smoke Generator electrical cable for all vehicles will be disconnected at smoke generator fuel pump prior to adding JP8. A Warning Tag will be attached to the vehicle mastepanel stating that the smoke generator will not be used (Tag shall state: Fuel cells contain JP8).

All Hull and, Turrets will be disassembled, abrasively cleaned and inspected for cracks and repaired as required. Visual cracks shall be inspected using non-destructive testing (NDT). All corrosion in accordance to the Marine Corp Order TM-3080-50.

11. All vehicle track, to include pads, and sprockets shall be serviceable to Condition Code "A" T158LL Track, in accordance with TB 43-0001-39-5 (100% replacement). Any serviceable track, sprockets, removed and not reused shall be reported to SCMC (Code 576-3), with a copy to MCSC, (Code AFSS, PMM-142), Tanks Section, Albany, GA and disposition instructions will be provided to ensure maximum usage is attained.
12. All road wheels will be serviceable Condition Code "A" in accordance with TB 430001-39-5 (100% replacement). Condition Code "B" road wheels shall be reported to SCMC (Code 576-3), with a copy to MCSC, (Code AFSS, PMM-142), Tanks Section, Albany, GA and disposition instructions will be provided to ensure maximum usage is attained.
13. All Nuclear Biological Chemical (NBC) plugs will be stowed and the hole will be screened. **(FSD Action)**
14. All Line Replaceable Units (LRU), Digital Electronic Control Units (DECU) and Computer Electronics Units (CEU) batteries will be 100% replaced. DECU batteries may be charged if capabilities exist. Electronic Muzzle Reference Sensor (EMRS) if applicable.
15. Ammo compartments must be free of moisture, dirt, rust and corrosion. Preserve ammo door with solid film lubricant.
16. Fire extinguishers shall have only MARROTTA or HTL type valves (NO CROWN). 1600 Test will be performed.
17. All fire bottles will be hydrostatic tested and stenciled in one inch letters to reflect test date in a visible area as well as being stamped w/test date.
18. Hydraulic leaks are unacceptable. Replace the Brake Accumulator Tee, Tube to Boss (NSN 4730-00-684-6028) on all vehicles.
19. All Gas Particulate/Main NBC will be replaced 100%. Only M48A1 Filters will be used. Replace with new filters and tag change date.
20. All V Packs and exhaust duct seals shall be replaced 100%. All pre-cleaners will be cleaned/inspected, ensuring vortex tubes are not damaged or bent. All serviceable excess will be reported to SCMC (Code 576-3), with a copy to MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA.
21. Serial Numbers D11239/L11239 and above will be of M1A1 Common Tank configuration. (Not to be worked under this program).
22. During the SOAR of the M1A1 Main Battle Tanks, the Depot will remove all existing communication installation hardware/components/intercom components and clean/inspect/ test for serviceability. Any component found unserviceable will be repaired or replaced. After installation of components, the Radio shop will install and check system prior to vehicle acceptance. Position

Locating Reporting System (PLRS) is checked for voltage at the connectors and cables only. Antenna mounts will be installed and Antenna elements will be stored in sponson box.

23. Ensure all M1A1 Main Battle Tanks are in compliance with E3Q Directives.

24. All main NBC components will be removed from the sponson box, disassembled, rebuilt and tested as individual components on the applicable component test consoles prior to reinstallation. The NBC seal shall be replaced. NBC components must be free of moisture, dust, rust and corrosion.

25. Inspect Pulse Jet Air System (PJAS) Scavenge Fan, Blades, Disk Packs and Universal Joints and repair/replace.

26. Unless otherwise directed, the Depot shall paint the interior/exterior of the vehicle with Water Reducible Chemical Agent Resistant Coating (CARC) and spot paint the interior as indicated in TM 4750-15/1 and TM 4750-15/2. Should the coating not be available the depot shall request a waiver from MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA representative on a by system/vehicle basis.

27. The Depot Inspector will record a "B" in block 16 of the monthly page of (NAVMC 10394) contained within the BI Annual Service Preventive Maintenance Manual. Block 17 will state the BSPM has been completed.

28. All engines and transmissions will be 100% disassembled and rebuilt. Components of power pack assembly (i.e. cooling towers, PJAS fan, bolt on accessories, but not limited to) shall be inspected for erosion, corrosion, and thermal damage shall be repaired and replaced as necessary.

**NOTE:** All Engine and Transmissions will be dynamometer tested to ensure they meet current specifications prior to installation back into the vehicle.

29. Engine Performance: M1A1 Main Battle Tanks leaving the Depot must meet the current performance standard of 41.5 Miles Per Hour + or- 3.5 Miles Per Hour as determined by the use of a Radar Gun. Mission Capability Power (MCP) number will not exceed 3. The Engine should have sufficient power to achieve and maintain the required speed regardless of the time of day or temperature. Any exception would require a waiver from MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA.

**NOTE:** The MCP number will not be the determining factor on the acceptance/rejection of an engine. If an Engine displays a power percentage of MCP number, which does not meet with the unit standard, engine performance can be verified by operating it in a vehicle per the manual vehicle speed test. The engine health test will be performed twice: once after road test, and again 24 hours later (when the engine is cold).

Request for waiver shall contain the following:

Date of Test \_\_\_\_\_.  
 Temp at Time of Road Test \_\_\_\_\_.  
 DECU Percent of Power \_\_\_\_\_.  
 MCP# \_\_\_\_\_.  
 Day Power \_\_\_\_\_% TI V \_\_\_\_\_ PTS V \_\_\_\_\_ Table A and E 20-1-2  
 Altitude \_\_\_\_\_. Table G 20-1-2  
 Vehicle Location \_\_\_\_\_.  
 Engine and Vehicle Ser#'s \_\_\_\_\_  
 Engine Components Replaced During Rework:

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30. The Hull Network Box Time Meter shall be replaced.
31. Frequency response and stabilization test shall be used along with the 1800 Test.
32. All Electronics and Optical components will be disassembled, cleaned and checked for rust/corrosion/moisture and thermal damage. Any unserviceable components will be replaced or forwarded to the appropriate Source of Repair (SOR).
33. All circuit card connections will be tested, cleaned and the LRUs will be retested prior to reinstallation.
34. All wiring harnesses will be removed with the exception of Headlight Harness and the Fuel sensors (left and right), cleaned and 100% tested utilizing electronic test equipment, repair/replace as necessary prior to reinstallation.
35. All gun tubes must have 750 Effective Full Charges (EFCs) remaining; Gun Tubes removed with fewer than 750 shall be identified to SCMC (Code 5763), with a copy to MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA for disposition instructions. All tubes shall be Borescoped to ensure serviceability.
36. All Recoil, Traversing and Elevation Mechanisms will be 100% disassembled and rebuilt in accordance with DMWR 9-2350-264-2. The servo valve will be 100% replaced.
37. All Vision Blocks will be condition Code "A". (Only Laser Safe vision blocks are authorized).
38. Gunners Primary Sight (GPS) assembly will be built to a Condition Code "B" Level. Depot will clean and replace broken or damaged windows, optical filters, electronic panels and eyepieces associated with the GPS. If any component is found to be unserviceable, component will be replaced.

The Slip Ring will be inspected/tested and replaced if required.

The Race Ring shall be disassembled inspected and repaired. The inspection shall include:

- (a) Disassembly of the race ring.
- (b) Inspect race surfaces for pitting, gouging and wear.
- (c) Machining of race surfaces if required.
- (d) Inspection of all threaded holes on the race ring, using thread gauges.
- (e) Replacement of all bearings and springs.
- (f) Replacement of race ring dust seal.
- (g) Replacement of race ring NBC seal.
- (h) Replacement of race ring NBC seal retaining spring.
- (i) Corrosion shall be treated in accordance with TM-3080-50.

41. The following action will be taken to improve the quality of preservation on the M1A1 Main Battle Tank, in addition to the requirements of ATPD2240 dated 9 June 1998.

- a. Cover the NBC air intake on the right side of the vehicle.
- b. Cover the External Auxiliary Power Unit (EAPU) exhaust fan.
- c. Cover the air access door on the right and left of the vehicle.
- d. Disconnect the negative buss bar. Seal battery box doors.
- e. Remove the drain plugs on the bottom of the storage box.
- f. Seal Tank Commanders Hatch.
- g. Apply P-19 preservative to the inside turret bolts around the Loaders Hatch.
- h. Apply P-11 (GAA) to all exposed non-painted bare metal on the interior of the M1A1 Main Battle Tank.
- i. Ensure all required areas in the interior of the vehicle are painted.
- j. Tape up Drivers and Loaders Hatch.

**NOTE:** This operation will have to take place after the vehicle is placed on the rail car.

- k. Seal the access hole for the wind sensor.
- l. Cut a breather hole in the wind sensor preservation bag so the bag will not collect water or condensation.
- m. Clean the paint off of the side panel pins and apply P19 preservation to the surface.

n. Seal the gun tube elevation area on exterior of turret.

42. MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA reserves the right to request a Production Progress Meeting when deemed appropriate to discuss issues of concern regarding cost, schedule and performance. MCSC (Code AFSS, PMM-142), Tanks Section, Albany, GA support objectives as they relate to throughput time are threshold of 140 days with an optimal objective of 90 day.

Components found unserviceable during the (SOAR) process shall be brought back to a condition Code "B" status.

**NOTE:** For purposes of clarification and definition, throughput time shall be defined as that time the vehicle is received by the depot to perform those maintenance function tasks required to bring the vehicle to a serviceable condition Code "B" status, to include the time it takes the vehicle through process through Division Final and be accepted by the customer.

USMC # \_\_\_\_\_

**APPENDIX B**

Today's date \_\_\_\_\_

Serial # \_\_\_\_\_

**M1A1**

Miles \_\_\_\_\_

**Inspection Checklist**

Hours \_\_\_\_\_

**HULL**

- 1. ROADTEST** Inspect vehicle condition and fluid levels prior to road test. Class I, \_\_\_\_\_  
 II, III fuel leaks are unacceptable. Verify operation of all controls  
 and suspension system components. Warning/caution lights must  
 operate. Road test vehicle at least 5km. Perform Engine Health test  
 and BIT on DECU prior to and after road test; if fault message  
 appears on display, troubleshoot accordingly.
- 2. PERFORMANCE** Min. speed requirement shall be 41.5 mph +/- 3.5 mph as \_\_\_\_\_  
 determined by the use of a Radar Gun. This is a Depot requirement  
 for this SOW.
- 3. SPEEDOMETER** Must be operational. Unusual movement of needle is unacceptable. \_\_\_\_\_
- 4. PANELS DIP, DMP, DAP**
- a. Gages, lights and switches shall operate properly. \_\_\_\_\_
  - b. All data shall be legible. \_\_\_\_\_
  - c. Mounting. \_\_\_\_\_
- 5. SMOKE GENERATOR** Smoke generators shall be disconnected and red-tagged on steering \_\_\_\_\_  
 column "DO NOT USE".
- 6. PARKING AND SERVICE**
- a. Apply parking brake, move shift control to "D" and run engine \_\_\_\_\_  
 slightly above idle. (1000-1100 rpm). Tank should not move.
  - b. Hydraulic pressure must remain between 1150 and 1700 PSI on \_\_\_\_\_  
 parking brake gage. Leaks are unacceptable.
- 7. DRIFTING** Drive tank with control centered. Unusual wondering or pulling is \_\_\_\_\_  
 unacceptable. REQUIREMENTS: 3 feet drift maximum in 100  
 foot distance on smooth pavement.



<b>8. SHIFT RANGE</b>	<p>a. Control shall operate properly, no binding. _____</p> <p>b. Transmission shall operate properly in all ranges. _____</p> <p>c. Check full steer down shift switch for proper operation. _____</p>
<b>9. TACTICAL IDLE</b>	Must operate properly. REQUIREMENT is 1200 - 1400. _____
<b>10. HULL</b>	<p>a. Damaged, missing parts, and leaks are unacceptable. All lines, fittings, hardware, and components shall be serviceable. _____</p> <p>b. All labels and decals must be affixed and legible. _____</p>
<b>11. SKIRTS, HARDWARE</b>	Must all be present and serviceable. Hinges and struts shall be serviceable with pins straight, secured with ring pins or roll pins. Cracks and damage are unacceptable. _____
<b>12. FENDERS MUDGUARDS</b>	Holes/cracks NTE 3/8", dents NTE 8" in length and 1/2" in depth. Shall be properly installed with torsion bar hold-down assemblies. _____
<b>13. HULL ACCESS &amp; GRILL DOORS</b>	All doors and accesses shall be serviceable and in place with required hardware _____
<b>14. EXTERIOR LIGHTS</b>	All lights shall function properly, housing shall be serviceable, all mounting secure. Lenses shall not be cracked and shall not contain moisture. _____
<b>15. PLENUM SEAL</b>	Remove hull inspection plate on bottom of vehicle, inspect seal for sealing, cuts, rips, or holes. Insure seal clamp is flat and in place around flange. <b>NOTE:</b> No clamp required on new type seal. _____
<b>16. DRAIN VALVES</b>	Shall operate properly without binding. _____
<b>17. TRACK ADJUSTING LINK AND TRACK TENSION</b>	Loose, missing, broken hardware and lube fittings, loose or missing lock bolt is unacceptable. Pressure relief valve must be capable of holding 2750 - 3200 PSI. _____

**18. ROADWHEEL,  
COMP IDLER,  
SUPPORT  
ROLLERS**

Must be serviceable to include the wearplates. Fifty percent factor in TM refers to width only. Wear plate shall have a minimum of circumference of the wheel at the top of plate. \_\_\_\_\_

Leakage Criteria: No grease leakage, however, lubrication leakage is normal at rear of Support Roller in seal adjacent to housing during lubricating. \_\_\_\_\_

**19. SHOCK  
ABSORBERS**

a. After road test, check housings for temp cooler than others. Check with hand. \_\_\_\_\_

b. The following conditions are unacceptable: \_\_\_\_\_

(1) Oil leaks. \_\_\_\_\_

(2) Loose or damaged hardware, plugs, and fittings. \_\_\_\_\_

(3) Cracked, painted, or distorted sight gage. (Frosting is acceptable). \_\_\_\_\_

(4) Contaminated. \_\_\_\_\_

c. Leakage Criteria: No oil leakage around Shock Absorbers. \_\_\_\_\_

**20. BUMPER STOP  
BRACKETS**

Missing/broken brackets are unacceptable. Required mounting hardware shall be tight at the 1, 2, and 7 positions. \_\_\_\_\_

**21. TORSION BARS**

The following conditions are unacceptable: \_\_\_\_\_

(1) Arm lifted off track. \_\_\_\_\_

(2) Number 2 thru 6 arms can be lifted with pry bar. \_\_\_\_\_

(3) Tank is tilted or lifting of road wheel and track at the number 1, 2, and 7 positions \_\_\_\_\_

(4) Broken, damaged, or missing caps. \_\_\_\_\_

**22. ROADWHEEL**

a. After road test, check hubs for one hotter (unusual temp) than others with hand. \_\_\_\_\_

b. The following conditions are unacceptable: \_\_\_\_\_

(1) Improper oil level. \_\_\_\_\_

(2) Loose hardware, plugs and fittings. \_\_\_\_\_

(3) Cracked, painted, or distorted hubcaps. \_\_\_\_\_

(4) Missing or loose support roller retainer shaft retainer pin. \_\_\_\_\_

(5) Contaminated \_\_\_\_\_

c. Comp idler shall meet requirements of 1/8 in. clearance between end connector and skirt. \_\_\_\_\_

d. Gap between the comp idler and retainer shall not exceed 5/32 in. "No" Metal to metal contact is authorized. \_\_\_\_\_

e. Leakage Criteria: No evidence of oil leakage (weep) around Road wheel and Compensating Idler Hubs at fill plug and flange of hubcaps. At the rear of each hub in the seal area leakage not to exceed 1 drop of oil in 2 hours. At each Arm Upper Spindle in the seal area at positions 1, 2, and 7 leakage not to exceed 1 drop of oil in 2 hours. No grease leakage at seal areas at Upper Spindle at positions 3, 4, 5, and 6. \_\_\_\_\_

**23. SPROCKETS,  
HUBS, FINAL  
DRIVES**

The following conditions are unacceptable:

(1) Missing or loose hardware. \_\_\_\_\_

(2) Cracks or sharp edged gouges at hub. \_\_\_\_\_

(3) Exceeds wear gauge limits. \_\_\_\_\_

(4) Excessive cupping. \_\_\_\_\_

(5) If power pack is pulled, check trunions, bolt holes etc. \_\_\_\_\_

Leakage Criteria: No evidence of drip or droplet leakage except during and immediately after engine operation when a drip of 1 drop per 5 minutes is permissible at the Output Shaft Seal area. \_\_\_\_\_

- |  |   |
|--|---|
| <b>24. TRACK</b>                               | <p>a. Inspect shoe assemblies for missing, bent, or broken center guides and loose or missing nuts and bolts. _____</p> <p>b. Check for missing, cracked, or unserviceable end connectors. _____</p> <p>c. End connector wedge bolts shall be tight and seated properly. _____</p> <p>d. Check for cracked or broken end plates. _____</p> <p>f. Inspect for dead (broken) track shoes. (A dead track shoe appears to be out of line.) _____</p> <p>g. Check for exposed binocular tubes on road wheel path and or grouser surface. _____</p> |
| <b>25. FUEL FILLER NECKS, TANK, AND COVERS</b> | <p>Filler strainers shall be serviceable and clean. Neck cap, chain, grommet cover, and hardware shall be serviceable. Leaks are unacceptable. _____</p>  |
| <b>26. TOW PINTLE, TOW POINTS ON HULL</b>      | <p>a. Locks, safety pins, and chains shall be installed and free of damage. _____</p> <p>b. Tow pintle shall open and rotate properly, cracks and excessive play is unacceptable. _____</p>   |
| <b>27. BATTERIES</b>                           | <p>a. Must start engine; no corrosion present. _____</p> <p>b. Battery cables shall be tight and rubber covers serviceable and installed correctly. _____</p> <p>c. Fluid levels shall be correct. _____</p> <p>d. Battery compartment shall be clean. _____</p> <p>e. Access doors and hardware shall be serviceable. _____</p>  |
| <b>28. PTS ACTUATOR</b>                        | <p>Visually inspect PTS actuator. Bottom elbow shall be parallel to the centerline of the cylinder hose. Swaged end shall be toward the front of the engine. Swaged end of the top hose will be positioned at approximately the 6 - 7 o'clock position. _____</p>   |

- 29. AIR INDUCTION SYSTEM**
- a. Access doors, grills, and mounting hardware shall be serviceable. \_\_\_\_\_
  - b. Precleaner assembly shall be free of dents and cracks. Must seal on plenum box. Latches shall be serviceable. Damaged Vortex Tubes shall not exceed 9 unserviceable tubes. \_\_\_\_\_
  - c. Air cleaner elements (VEE-Packs) shall be clean and serviceable. \_\_\_\_\_
  - d. Plenum box shall be clean and free of cracks and broken welds. \_\_\_\_\_
  - e. Perform PJAS operational check, maintain 1550 RPM for 2 minutes. System shall start cleaning cycle of 27 pulses, in 3 additional minutes. \_\_\_\_\_
- 30. ENGINE OIL TANK/SYSTEM**
- Oil leaks are unacceptable. Damaged lines, components, and loose connections are unacceptable. TI-08953A-15/4 relates. Refer to Leakage Criteria. \_\_\_\_\_
- 31. FUEL SYSTEM**
- Fuel lines shall be free of damage. Fuel leaks are unacceptable. Fire sheathing shall be serviceable. Loose connections are unacceptable. **NOTE:** IGV/PTS components are part of the fuel system. \_\_\_\_\_
- 32. AIR BLEED TUBE**
- Shall be free of cracks, breaks, holes, or tears. All mounting hardware and clamps shall be serviceable and tight. \_\_\_\_\_
- 33. AIR SCAVENGER TUBE**
- Cracks, breaks, holes, or tears are unacceptable. All mounting hardware and clamps must be serviceable and tight. \_\_\_\_\_
- 34. ELECTRICAL HARNESS**
- Cracks, breaks, bare wires, cracks in heat shrink material and protrusions, or wire braiding are unacceptable. \_\_\_\_\_
- 35. SMOKE GENERATOR SYSTEM**
- Damaged, leaking, loose lines and hoses, fittings, clamps, and mounting hardware are unacceptable. \_\_\_\_\_
- 36. TRANSMISSION**
- Transmission components shall be free of damage. \_\_\_\_\_
- Leakage Criteria: No drip except during and immediately after engine operation, when a drip of 1 drop per 5 minutes is allowed at the Output seal area.

**37. ENGINE AND  
TRANSMISSION  
OIL COOLING  
SYSTEM**

a. Fan and coolers must be clean. \_\_\_\_\_

b. Cracked, missing, or damaged hardware, tubes and fittings are unacceptable. \_\_\_\_\_

**38. OIL CROSS  
OVER TUBE**

c. Oil leaks are unacceptable. \_\_\_\_\_

Damaged tube fittings and oil leaks are unacceptable. Tube shall not be lying on exhaust duct. \_\_\_\_\_

**39. ENGINE**

Damaged tube fittings and oil leaks are unacceptable. Tube shall not be lying on exhaust duct. \_\_\_\_\_

**40. ENGINE  
COMPARTMENT**

a. Dirty or damaged fire sensors are unacceptable. \_\_\_\_\_

b. Any missing or damaged heat shields are unacceptable. \_\_\_\_\_

c. All hoses, fittings, fluid lines, wiring harnesses, connections/connectors and hardware shall be tight and free of damage that shall be detrimental to operation. \_\_\_\_\_

d. All components shall be mounted properly with serviceable hardware. \_\_\_\_\_

e. Brake and steering controls shall be free from damage. \_\_\_\_\_

f. Mounting pins shall be serviceable and chains shall be mounted. \_\_\_\_\_

g. Electrical panel connectors shall be free of arcing Connectors shall lock tight to the panel. \_\_\_\_\_

h. No more than 1 quart of oil consumption permitted in 1 hour. \_\_\_\_\_

i. Negative and Positive electrical quick disconnects will be silicone from water exposure. \_\_\_\_\_

Leakage Criteria: (Engine/Transmission Mating Area) No more than 4 drops of fluid per minute. (Engine) A total of 3 drops, 9ccs, per minute is allowed at the Accessory Gearbox drains during engine running or up to 2 hours after shutdown. No evidence of oil at any of the 4 weep holes. (Output Shaft Seal, # 10) Shall not exceed 2 drops, 6ccs, per minute during engine running or up to 2 hours after shutdown. (All other areas) Shall exhibit no leakage greater than 2 drops, 0.1ccs, per hour. \_\_\_\_\_

**41. HEAT  
EXCHANGER  
HYDRAULIC**

Must be clean, no oil leaks, and all components shall be serviceable. \_\_\_\_\_

**42. FIRE  
EXTINGUISHER**

a. Check all fire bottle gages for proper pressure relative to ambient temperature. All labels shall be legible. \_\_\_\_\_

b. Check for proper mounting, adjustment and serviceability of all hardware \_\_\_\_\_

c. Verify bottles are tight, in mounting brackets, and torqued properly. \_\_\_\_\_

d. Insure safety pin and anti-recoil plug are present and serviceable. \_\_\_\_\_

e. Hydrostatic Test Date **MUST** have three (3) years remaining; if not, fire extinguisher **MUST** be Hydrostatically tested and stamped with the correct date. \_\_\_\_\_

NOTE: In addition, Hydrostatic Test Date shall be stenciled in 1-inch letters in a visible area on the fire bottle.

**43. HYDRAULIC  
SYSTEM  
RESERVOIR**

a. Filter indicators shall not be popped out. \_\_\_\_\_

b. Safety pins shall be present. \_\_\_\_\_

c. Filter and indicators shall be safety wired. \_\_\_\_\_

d. Loose or damaged hardware and components are unacceptable. \_\_\_\_\_

e. Fluid level shall be FULL at O pressure. \_\_\_\_\_

f. Check Hull distribution manifold for leaks. \_\_\_\_\_

**44. HULL  
AMMUNITION  
COMPARTMENT**

- a. Pins and door shall be serviceable and operate freely. \_\_\_\_\_
- b. Excessive looseness, broken rollers etc. that will cause door to bind on track is unacceptable. \_\_\_\_\_
- c. Mounting brackets and seals shall be free from distortion. \_\_\_\_\_
- d. Tubes shall be serviceable, plunger must move freely. \_\_\_\_\_
- e. Bent, broken or missing springs are unacceptable. Angle of spring shall be less than 90 degrees. \_\_\_\_\_
- f. Shall be clean and free of moisture. \_\_\_\_\_

**45. HULL  
ELECTRICAL**

All cables shall be free of damage. Mounting hardware and connectors shall be serviceable. \_\_\_\_\_

**46. STEERING  
BRAKE CONTROLS**

Must be serviceable. No binding and function properly. \_\_\_\_\_

**47. HULL  
ELECTRICAL  
NETWORKS BOX**

Must be free from cracks, breaks, and loose connections. All circuit breakers shall operate properly and labeling legible. \_\_\_\_\_

**48. PERSONNEL  
HEATER**

- a. Shall operate properly. Insure all indicator lamps function. \_\_\_\_\_
- b. Heater controls shall operate freely. No fuel or exhaust leaks are acceptable. \_\_\_\_\_

**49. DRIVERS NIGHT  
VISION**

- a. System shall be operational and checked with operational DNV. Mounting and storage device shall be serviceable. \_\_\_\_\_
- b. DNV shall operate properly. \_\_\_\_\_



**50. DRIVER'S  
HATCH**

- a. Shall open, close, and lock into position freely. \_\_\_\_\_
- b. Seal shall be serviceable. Minor nicks and cuts that do not affect serviceability are acceptable. \_\_\_\_\_
- c. Periscopes shall be installed and serviceable. Wipers/ washer must be operational. \_\_\_\_\_
- d. Knobs shall operate freely. All hardware shall be present and serviceable. \_\_\_\_\_
- e. Check drivers hatch interlock system operation. \_\_\_\_\_

**51. DRIVER'S  
DOME LIGHT**

Must operate properly. Lenses shall not be cracked or broken. All mounting hardware shall be installed and serviceable. Red or blue lenses are acceptable. \_\_\_\_\_

**52. DRIVER'S  
SEAT**

- a. Shall be serviceable. All adjustments shall operate properly. \_\_\_\_\_
- b. Headrest shall be serviceable and lock into position. \_\_\_\_\_
- c. Cushion tears of 1 inch or less may be taped. \_\_\_\_\_

**53. TURRET  
PUMP/GAGE**

Check operation and component serviceability. Seal must hold 25 PSI for a minimum of 20 minutes. \_\_\_\_\_

**54. BILGE PUMP**

Must be serviceable with no unusual noise. \_\_\_\_\_

**55. CLEANLINESS  
OF VEHICLE**

Vehicle must be clean. \_\_\_\_\_

**56. NBC BACK-UP  
SYSTEM**

- a. Hose, connectors, and orifices shall be serviceable. \_\_\_\_\_
  - b. Air flow must be evident at hose end with system operating. \_\_\_\_\_
- NOTE: At all crew stations (4)

**57. MAIN NBC  
SYSTEM**

- a. Remove NBC sponson covers and insure box is clean and replace seal. \_\_\_\_\_
- b. With engine running at tactical idle; check that the NBC main mode light is lit. Feel for air escape at all hoses and clamps in box. \_\_\_\_\_
- c. Turn air temp control knob to full warmer position and feel for warm air at bulk dump valve on the NBC filter manifold. \_\_\_\_\_
- d. While turning air control knob from full cooler position to full warmer position, have a crewmember observe the NBC exhaust output on the left side of the tank. A change in the NBC exhaust output should be noticed. If a noticeable change in the NBC exhaust does not occur, or there is no output at the NBC exhaust duct, the tank is non-mission capable (NMC). \_\_\_\_\_
- e. Check sponson overheat lights. \_\_\_\_\_
- f. Comply with all "Safety of Use Messages." \_\_\_\_\_

## **TURRET**

### **1. TURRET EXTERIOR**

Storage boxes shall be complete and serviceable. \_\_\_\_\_

### **2. GUN MOUNT**

a. Hydraulic leaks are not acceptable. \_\_\_\_\_

b. Hose connections shall be secure. \_\_\_\_\_

c. Mounting hardware for all components shall be secure and serviceable. \_\_\_\_\_

d. Replenished oil level shall be above minimum. \_\_\_\_\_

e. Exercise gun if over 90 days has elapsed since last exercise. \_\_\_\_\_

**NOTE:** recoil leak criteria apply after exercising/firing. \_\_\_\_\_

### **3. GUN TUBE**

a. Shall be inspected in accordance with TM 9-1000-202-14. \_\_\_\_\_

b. Must have 50% remaining gun tube life (750 Rounds Remaining). \_\_\_\_\_

c. Parts I & II of the Weapons Record Book shall be complete in accordance with TM 4700-15/1. \_\_\_\_\_

d. Shall be clean. \_\_\_\_\_

### **4. BORE EVACUATOR**

a. Inspect for cracks, dents, and punctures. Ensure all mounting hardware is serviceable and complete. \_\_\_\_\_

b. Shall be properly installed. \_\_\_\_\_

### **5. THERMAL SHROUDS**

a. Shall be installed properly and free of damage. \_\_\_\_\_

b. Cracks are not acceptable. \_\_\_\_\_

### **6. MUZZLE REFERENCE**

a. Evidence of moisture inside is unacceptable. \_\_\_\_\_

b. Cracks, breaks, and loose or missing hardware is unacceptable. \_\_\_\_\_

c. Caution/instruction plate shall be installed and legible. \_\_\_\_\_

**NOTE:** With MRS lever to the IN position, reticle must be clear and visible.

- 7. BREECH GROUP**
- a. Breech block and loaders tray shall operate without binding and be free of burrs and cracks. \_\_\_\_\_
  - b. Chamber, block, breech ring, and extractors shall be free of corrosion/rust and excess wear. \_\_\_\_\_
  - c. All components shall be cleaned, lubricated and function properly. \_\_\_\_\_
- 8. FIRING CIRCUIT  
BLASTING  
MACHINE**
- a. Harnesses/wiring must be properly installed and in good condition. \_\_\_\_\_
  - b. Safety switches and relays shall be properly installed and function properly. \_\_\_\_\_
  - c. Firing at all stations shall be functional when checked with firing circuit tester. \_\_\_\_\_
  - d. Must pass firing inhibit checks. \_\_\_\_\_
- 9. MAIN  
HYDRAULIC  
PUMP**
- a. Pressure shall stay between 1500 - 1700 PSI with the engine running. \_\_\_\_\_
  - b. Unusual noises in pump during operation as well as any hydraulic leaks are unacceptable. \_\_\_\_\_
- 10. AUXILIARY  
HYDRAULIC PUMP**
- a. Pressure shall stay between 890 - 1760 PSI during system operation. \_\_\_\_\_
  - b. Unusual noises during operation as well as any hydraulic leaks are unacceptable. \_\_\_\_\_
  - c. Auxiliary Pump should not run continuously. \_\_\_\_\_
- 11. MAIN  
ACCUMULATOR**
- a. Nitrogen pressure must be between 600 - 800 PSI. \_\_\_\_\_
  - b. All mounting hardware must be serviceable and installed correctly. \_\_\_\_\_

**12. ELEVATION  
MECHANISM**

- a. Hydraulic leaks are unacceptable. \_\_\_\_\_
- b. All mounting hardware shall be serviceable and installed properly. \_\_\_\_\_
- c. Cylinder check valves shall be laced. \_\_\_\_\_
- d. Filter indicators should not be popped out. \_\_\_\_\_

**13. LIGHT  
SWITCHES  
RHEOSTATS**

Shall be properly installed and function properly. \_\_\_\_\_

**14. SMOKE  
GRENADE SYSTEM**

- a. Switches, wiring, and electrical components shall be properly installed and serviceable. \_\_\_\_\_
- b. All mounting brackets shall be free of cracks, broken welds etc. All hardware shall be installed and tight. \_\_\_\_\_

**15. GUNNER'S  
PRIMARY SIGHT**

- a. Must be complete. Ballistic doors must function properly. \_\_\_\_\_
- b. Must pass all functional tests and checks. \_\_\_\_\_
- c. All lights, switches, knobs, and levers must be complete and function properly. \_\_\_\_\_
- d. Leakage of water between Turret and GPS is not acceptable. If questionable, check with water from outside of Turret. No leakage is acceptable. \_\_\_\_\_
- e. Moisture and/or fungus present in sight are unacceptable. \_\_\_\_\_

**16. GPS EXTENSION**

- a. Field of view must be equal to that of the GPS. \_\_\_\_\_
- b. Diopter setting shall be capable of +2 to -6. \_\_\_\_\_

**17. GUN/TURRET  
POWER CONTROL**

- c. Moisture or fungus in sight is unacceptable. \_\_\_\_\_
- a. Control handles must be capable of operation in elevation and azimuth. Commander's handle must override. \_\_\_\_\_
- b. Check for proper response and smoothness. \_\_\_\_\_
- c. Check azimuth deck clearance switch for proper operation. \_\_\_\_\_

<b>18. GUN/TURRET MANUAL CONTROL</b>	a. Must be capable of elevation/depression and azimuth movement of the turret and gun.	_____
	b. Check for proper response and smoothness.	_____
	c. Turret shall traverse in both speeds.	_____
<b>19. STABILIZA- TION</b>	Must be capable of maintaining target acquisition regardless of hull movement.	_____
<b>20. LOADER'S PANEL</b>	Must be installed properly. All switches and lights shall be functional.	_____
<b>21. COMMANDER'S PANEL</b>	Must be installed properly. All switches and lights must be functional. All panel functions must be operational.	_____
<b>22. LOADER'S STATION</b>	a. Seat and platform must lock in all positions.	_____
	b. Knee, toe, and shoulder guards must be installed and free of damage.	_____
	c. Cushions will have no padding missing. Tears exceeding 1 inch are not acceptable. Tears less than 1 inch must be taped.	_____
<b>23. LOADER'S HATCH</b>	a. Hatch must be operational and lock in all positions.	_____
	b. Seals must be serviceable.	_____
	c. Periscope turntable must operate smoothly	_____
<b>24. LOADER'S MACHINE GUN MOUNT</b>	a. Missing or damaged parts are unacceptable.	_____
	b. Pintle mount, skate, and locks must be fully operational, without binding.	_____
<b>25. GUN/TURRET LOCKS</b>	Missing, bent, or damaged parts or welds are unacceptable. Must engage and disengage properly.	_____
<b>26. COMMANDER'S STATION</b>	a. Seat and platform must lock in all positions.	_____
	b. Guards must be installed, operational and free from damage.	_____
	c. Cushions will have no padding missing. Tears exceeding 1 inch are unacceptable. Tears of 1 inch or less will be taped.	_____

- |   |  |       |
|---|--|-------|
| <b>27. COMMANDER'S HATCH</b>            | a. Must be serviceable and lock in all positions.  | _____ |
|   | b. Seal must be serviceable.   | _____ |
| <b>28. COMMANDER'S WEAPON STATION</b>   | a. Must be capable of 360-degree traverse in both power and manual modes.  | _____ |
|   | b. Operation must be smooth during tracking.   | _____ |
|   | c. Commander's sight must be properly installed and the field of view shall follow the motion of the gun.                    | _____ |
|   | d. Sight must be free of moisture and fungus.  | _____ |
| <b>29. GUNNER'S STATION</b>             | a. Seat must be complete and must lock in all positions.   | _____ |
|   | b. All guards must be installed, free of damage and operate properly.  | _____ |
|   | c. Cushions will have no padding missing. Tears exceeding 1 inch are not acceptable. Tears of 1 inch or less shall be taped. | _____ |
| <b>30. GUNNER'S AUXILIARY SIGHT</b>     | a. Check for proper function, i.e. reticle brightness, focusing ring, filter knob, and selector knobs.                       | _____ |
|   | b. Moisture and/or fungus in sight are unacceptable.   | _____ |
| <b>31. TURRET DISTRIBUTION MANIFOLD</b> | Check for leaks. Leakage is unacceptable.  | _____ |
| <b>32. TURRET NETWORKS BOX</b>          | a. Check for proper installation of all components, wiring harnesses, circuit breakers, and connectors.                      | _____ |
|   | b. Check all visible harness assemblies near the electronics rack and networks box for frayed insulation and broken wires.   | _____ |
|   | c. Check all visible ground points for cracks, broken lugs, or loose connections.  | _____ |

**33. TRAVERSING  
MECHANISM**

a. Must be properly installed and functional. \_\_\_\_\_

b. Fluid must be at the proper level. \_\_\_\_\_

c. Manual drive mode light must come ON when manual palm handle is depressed. \_\_\_\_\_

d. Filter indicators shall not be popped out. \_\_\_\_\_

**34. WIRING  
HARNESS**

a. Check for “ F “ symbol and fire control fault malfunction light. \_\_\_\_\_

b. Check for cracks, breaks, cracks in heat shrink material, and protrusions of wire or abrading. \_\_\_\_\_

c. All cables within the turret, especially those near the circuit breaker box and loader's position should be dressed and tie wrapped. \_\_\_\_\_

**35. AMMO  
STORAGE TURRET**

a. Doors must be operational. Knee switch and door edge safety switches must be operational. All mounting hardware, hoses, pins, and latches must be serviceable and function properly. \_\_\_\_\_

b. Seals and rails must be clean and free of cracks burrs, breaks and excessive wear. \_\_\_\_\_

c. Caliber .50 and 7.62 ammo boxes must be serviceable and installed properly. \_\_\_\_\_

**36. CROSSWIND  
SENSOR**

a. Must be installed properly. Mount should be free of cracks. Latch assemblies and strikes must be free from cracks, bends, breaks, and loose or missing screws and must lock tightly in the upright position. Fraying of cable is unacceptable. \_\_\_\_\_

b. Sensor ports must be clean and free of cracks and dents. \_\_\_\_\_

c. Web strap must be serviceable. Fraying or missing strap components is unacceptable. \_\_\_\_\_

d. Cushioning pad must be serviceable and glued properly. \_\_\_\_\_

e. Must function properly. \_\_\_\_\_



<b>37. COMPUTER CONTROL PANEL</b>	a. Computer must accept and store all inputs from the control panel and TCP.	_____
	b. Must pass computer self test.	_____
<b>38. BORESIGHT</b>	Boresight main gun and fire control systems. Ensure system is capable of achieving and maintaining boresight information.	_____
<b>39. PURGING, CHARGING, SERVICING</b>	a. GPS.	_____
	b. GAS.	_____
	c. Commander's Extension.	_____
	d. CWS Sight.	_____
	e. LRF.	_____
	f. ICU	_____
	<b>NOTE:</b> Moisture and/or fungus in sights are unacceptable.	
<b>40. THERMAL IMAGING SYSTEM</b>	a. Perform TIS checkout procedure.	_____
<b>41. LABELS DECALS</b>	b. Insure all knobs and switches operate properly.	_____
<b>42. PLRS</b>	a. All labels and decals must be affixed throughout the turret.	_____
	b. All labels shall be legible and not obstructed by paint or grease. Ensure all mounting hardware is complete.	_____ _____
<b>43. MCD</b>	Ensure all mounting hardware is complete.	_____
<b>44. EAPU</b>	a. Unit must be installed properly and securely in the bustle rack.	_____
	b. Class I, II, and III oil and fuel leaks are unacceptable.	_____
	c. Check units' operation from all positions and voltage output.	_____
<b>45.COMMUNICA-TIONS</b>	a. Ensure intercom system is operational from all crew stations.	_____
	b. Ensure "SINCGARS Installation Kit" is installed and complete.	_____
<b>46. MODIFICATIONS:</b> Ensure all modifications are correctly applied.		

## **APPENDIX C**

### **LEAKAGE TERMINOLOGY IS DEFINED AS:**

1. CLASS I: Seepage of fluid (as indicated by wetness or discoloration) not great enough to form drops.
2. CLASS II: Leakage of fluid great enough to form drops but not enough to cause drops to drip from the item being checked.
3. CLASS III: Leakage of fluid great enough to form drops that fall from the item being checked.
4. WEEP: Any non-recurring evidence of fluid beyond the seal or joint.
5. SEEP: Any recurring evidence of fluid beyond the seal or joint that does not result in an accumulation of more than .05 cc volume.
6. DROPLET: Any recurring evidence of fluid beyond the seal or joint that does not result in an accumulation of more than .05 cc that does not fall.
7. DROP: A volume of .05 cc.
8. DRIP: Any recurring evidence of fluid beyond the seal or joint where a droplet or more forms and falls.

APPENDIX D  
M1A1 WEEKLY STATUS REPORT

				10%	20%	30%	35%	40%	50%	55%	60%	70%	80%	90%				95%		100%	
Prod. #	Job #	USMC#	Status	Tear Down	Steam	Hull Station	Turret Station	Service Pack	Susp.	Install Pack	NBC	1600 Test	Road Test	1800 Test	Commo	Steam	Paint	CWC	P&P	Div Final	Remarks
			In																		
			Out																		
			In																		
			Out																		
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**(1 Data Item)**

The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0701-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP _____ TM _____ OTHER _____ X							
D. SYSTEM/ITEM M1A1 Main Battle Tank	E. CONTRACT/PR NO.	F. CONTRACTOR							
1. DATA ITEM NO.  A001	2. TITLE OF DATA ITEM  Contractor's Progress, Status, and Management Report	3. SUBTITLE  Management							
4. AUTHORITY (Data Acquisition Document No.) DI-MGMT-80227	5. CONTRACT REFERENCE SOW 4.1	G. REQUIRING OFFICE MCSC (AFSS), Albany, Ga							
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED  A	10. FREQUENCY WEEKLY	12. DATE OF FIRST SUBMISSION See Blk 16	14. DISTRIBUTION					
8. APP CODE	11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION See Blk 16	a. ADDRESSEE	b. COPIES					
				Draft Final Reg Repr					
16. REMARKS Blk 4: Contractor format is authorized.  Blk 4: Tailor DI-MGMT-80227 as follows: Delete paragraphs 10.3g, 10.3h, 10.3i, and 10.3j.  Blk 12 & 13: The reporting period shall be from the first to last business day of each week. Initial submission shall be 30 DAC.  Blk 13: Reports shall be hard copy.   Distribution Statement A: Approved for public release: Distribution is unlimited.			MCSC (AFSS)	0	1	0			
			Albany, GA						
			15-TOTAL →				0	1	0

G. PREPARED BY <i>Samuel W. Moody</i>	H. DATE <i>3/26/03</i>	I. APPROVED BY <i>Wallace C. Dawson</i>	J. DATE <i>3/26/03</i>
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**(1 Data Item)**

Form Approved  
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0701-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government Issuing Contracting Officer for the CONTRACTPR No. listed in Block E.

[illegible]

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

G. PREPARED BY <i>Samuel W. Moody</i>	H. DATE <i>3/26/03</i>	I. APPROVED BY <i>Wallace C. Jansen</i>	J. DATE <i>3/26/03</i>
DD FORM 1423-1, AUG 96 (EG)			Page of Pages

# CONTRACT DATA REQUIREMENTS LIST


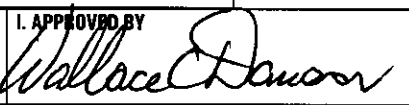
(1 Data Item)

Form Approved  
OMB No. 0704-0188

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<b>A. CONTRACT LINE ITEM NO.</b>		<b>B. EXHIBIT</b>	<b>C. CATEGORY:</b> TDP _____ TM _____ OTHER <input checked="" type="checkbox"/>	
<b>D. SYSTEM/ITEM</b> M1A1 Main Battle Tank		<b>E. CONTRACT/PR NO.</b>		<b>F. CONTRACTOR</b>
<b>1. DATA ITEM NO.</b> B001	<b>2. TITLE OF DATA ITEM</b> Inspection and Test Plan		<b>3. SUBTITLE</b>	
<b>4. AUTHORITY (Data Acquisition Document No.)</b> DI-QCIC-81110		<b>5. CONTRACT REFERENCE</b> Paragraph 3.7		<b>6. REQUIRING OFFICE</b> MARCORSYSCOM Albany (AFSS)
<b>7. DD 250 REQ</b> DD	<b>8. DIST STATEMENT REQUIRED</b>	<b>9. FREQUENCY</b> ASREQ	<b>12. DATE OF FIRST SUBMISSION</b> See Blk 16	<b>14. DISTRIBUTION</b>  a. ADDRESSEE b. COPIES Draft Final Reg Repro
<b>8. APP CODE</b>	A	<b>11. AS OF DATE</b>	<b>13. DATE OF SUBSEQUENT SUBMISSION</b> See Blk 16	
<b>18. REMARKS</b>  Block 12 - Submit 30 days after contract award by LT. Government requires 60 days to review and comment.  Block 13 - Final due 30 days after receipt of Government comments. Submit final plan by DD250.  Distribution Statement A: Approved for public release, distribution is unlimited.				<b>15. TOTAL</b>
				0 1 0

<b>17. PRICE GROUP</b>
<b>18. ESTIMATED TOTAL PRICE</b>

<b>G. PREPARED BY</b> 	<b>H. DATE</b> 3/26/03	<b>I. APPROVED BY</b> 	<b>J. DATE</b> 3/26/03
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*(1 Data Item)*

OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0701-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to the above address. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

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**18. ESTIMATED  
TOTAL PRICE**